

Appln No. 09/690,083

Amdt date October 25, 2004

Reply to Office action of June 25, 2004

REMARKS/ARGUMENTS

Applicant thanks the Examiner for his careful review of this application, and respectfully requests that the Examiner contact the undersigned to conduct a telephonic interview as soon as he begins to review this response.

Claims 1-120 are pending. Applicants have hereby amended independent claims 1, 42, 72 and 104. Applicants respectfully request reconsideration and allowance of the application.

The Examiner has now rejected claims 1-120 under 35 U.S.C. §103(a) as being unpatentable over Leon, U.S. Patent 6,424,954 ("Leon") in view of Cordery et al., U.S. Patent 6,567,794 ("Cordery et al."). Applicants submit that all of the pending claims in the application are patentable over the relied upon references, and respectfully request reexamination, reconsideration and allowance of this application.

Claim 1 has been amended to recite the following limitation: "wherein once the user is authenticated, the cryptographic device enters an operational state in which it continues to authenticate the user with respect to one or more transactions requested by the user." Similar limitations have been added in the other independent claims as noted in the respective claims. In claims 1 and 42, Applicants have removed the limitation regarding value processing as noted in the claims.

Applicants believe the amendment distinguishes the claimed inventions as recited in the respective claims over the relied upon references. In one exemplary embodiment of the invention set forth on page 57 of Applicants' originally filed

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specification, the client software and cryptomodule issue challenges to one another after a user has been authorized to further secure communication within the system. The specified language illustrates an exemplary process wherein enhanced security is achieved via continuing authentication.

With the success of the authorization state, the client software not only trusts the cryptographic module, but also shares a common HMK with the cryptographic module, which it uses to sign and challenge each successive message. FIG. 5 is an exemplary embodiment illustrating client software and cryptographic module (PSD) communication during the operational state. Client software 503 sends a new challenge message to cryptographic module 502, as shown by 501. The cryptographic module responds by signing the challenge with the shared HMK and then sends this ciphertext back to the client software, along with its own challenge, as shown by 504. Client software 503 compares the ciphertext of the challenge it originally sent to the cryptographic module, and also signs the message received from the cryptographic module.

If the signatures compare, the client software trusts the cryptographic module for

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this transaction. Client software 503 uses the cryptographic module challenge message to authenticate itself to cryptographic module 502. Client software 503 now sends the signed challenge that cryptographic module 502 had sent, with the addition of the client software local record of the user's AR and DR, as shown by 505.

Specification, p. 57, l. 16 - p. 58, l. 2.

The noted limitations do not appear to be disclosed in Leon or Cordery, either alone or in combination, and therefore the Applicants believe the rejections should be withdrawn.

The rejections should also be withdrawn because there does not appear to be the required motivation to combine the relied upon references. In particular, the claimed invention is not disclosed by Leon, the primary reference cited by the Examiner in support of the Section 103(a) rejection. Leon is of the category of specialized hardware-based systems located at the user's site that are specifically distinguished in the Background section of the present application. Leon's system teaches a dedicated postage metering system (SMD) connected to the user's computer as an external hardware device or circuit card that is portable. The SMD couples to the personal computer via a communications link 122 that can be a serial link such as an RS-232 interface. By carefully partitioning the various features of the metering system, Leon teaches that the SMD can be manufactured in a relatively small size and low cost unit. See Leon, col. 2, lines 29-40, col. 3, line 61- col. 4, line 20,

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FIGs. 1A and 1B. In Leon's system, each SMD performs state functions. See Leon, cols. 9, 10. Accordingly, in Leon's system, depending on the number of users, there may be thousands of individual localized SMDs attached to each user's PC. None of the SMDs disclosed in Leon are meant to be disassociated from a PC. Cordery also does not appear to disclose any teachings that would have motivated one skilled in the art to combine the noted disclosures in a manner that would have produced the claimed inventions in the absence of hindsight reconstruction. Accordingly, Applicants respectfully request that the rejections be withdrawn.

Based on the foregoing, Applicants respectfully submit that claims 1-120 are now in condition for allowance, and respectfully request early issuance of a Notice of Allowance.

Respectfully submitted,
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